



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/592,946	09/15/2006	Seong-Lok Hwang	36470-236071	8697

26694 7590 08/21/2009  
VENABLE LLP  
P.O. BOX 34385  
WASHINGTON, DC 20043-9998

EXAMINER
----------

CHEN, CATHERYNE

ART UNIT	PAPER NUMBER
----------	--------------

1655

MAIL DATE	DELIVERY MODE
-----------	---------------

08/21/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/592,946	<b>Applicant(s)</b> HWANG ET AL.	
	<b>Examiner</b> CATHERYNE CHEN	<b>Art Unit</b> 1655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 11, 18, 20, 21 and 26-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11, 18, 20, 21, 26-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

The Amendments filed on April 30, 2009 has been received and entered.

Currently, Claims 11, 18, 20-21, 26-29 are pending. Claims 11, 18, 20-21, 26-29 are examined on the merits. Claims 12-17, 19, 22-25 are canceled.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Election/Restrictions***

Applicant's election of the species lower alcohol, Sophorae Radix, Hinokitiol, capsicum tincture, in the reply filed on Oct. 22, 2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Response to Arguments***

### ***Claim Rejections - 35 USC § 103***

Claims 11, 18, 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takekoshi et al. (US 6497889 B2) and Kim (KR 1020000038214 A) and further in

Art Unit: 1655

view of Ishida et al. (JP 61212513 A) for the reasons set forth in the previous Office Action, which is set forth below. All of Applicant's arguments regarding this ground of rejection have been fully considered but are not persuasive.

Takekoshi et al. teaches cosmetic with hinokitiol, *Sophora flavescens*, *Asarum sieboldii* (column 7, lines 27, 53, 56-57), components at 0.01-5wt % for use as hair care cosmetic, hair shampoo, hair rinse, hair conditioner, hair nourishing agent, hair-growing agent (column 8, lines 32-50). *Asiasari radix* is also known as *Asarum sieboldii* (see <http://www.naturalstandard.com/index-abstract.asp?create-abstract=/monographs/herbssupplements/patient-asarum.asp>). *Sophorae Radix* is also known as *Sophora flavescens* (see [http://www.fzrm.com/plantextracts/Lightyellow\\_Sophora\\_Root\\_extract.htm](http://www.fzrm.com/plantextracts/Lightyellow_Sophora_Root_extract.htm)).

However, it does not teach capsicum tincture, concentrations, and lower alcohol extract of *Asiasari Radix*.

Kim teaches a hair growth composition with capsicum tincture and hinokitiol (Abstract).

Ishida et al. teaches ethanol extract of saishin or *Asiasarum sieboldi*, where 0.5% wt of the extract is used (Abstract). *Asiasari radix* is also known as *Asarum sieboldii* (see <http://www.naturalstandard.com/index-abstract.asp?create-abstract=/monographs/herbssupplements/patient-asarum.asp>).

Takekoshi et al. teaches cosmetic with hinokitiol, *Sophora flavescens*, *Asarum sieboldii* (column 7, lines 27, 53, 56-57), components at 0.01-5wt % for use as hair care cosmetic, hair shampoo, hair rinse, hair conditioner, hair nourishing agent, hair-growing

Art Unit: 1655

agent (column 8, lines 32-50). Kim teaches a hair growth composition with capsicum tincture and hinokitiol (Abstract). Ishida et al. teaches ethanol extract of saishin or *Asiasarum sieboldi*, where 0.5% wt of the extract is used, on skin (Abstract). Hair is attached to skin. When one washes hair, skin attached to the hair is also being washed. Thus, an artisan of ordinary skill would reasonably expect that hinokitiol, *Sophora flavescens*, ethanol extract of *Asarum sieboldii*, capsicum tincture could be used as the types hair care ingredient taught by the references. This reasonable expectation of success would motivate the artisan to use ethanol extract of the same ingredient in the reference composition. Thus, using all the claimed ingredients is considered an obvious modification of the references.

The references do not specifically teach adding the ingredients in the amounts claimed by applicant. However, the references do teach the composition for hair care. Takekoshi et al. teaches cosmetic with hinokitiol, *Sophora flavescens*, *Asarum sieboldii* (column 7, lines 27, 53, 56-57), components at 0.01-5wt % for use as hair care cosmetic, hair shampoo, hair rinse, hair conditioner, hair nourishing agent, hair-growing agent (column 8, lines 32-50). Kim teaches a hair growth composition with capsicum tincture and hinokitiol (Abstract). The amount of a specific ingredient in a composition that is used for a particular purpose (the composition itself or that particular ingredient) is clearly a result effective parameter that a person of ordinary skill in the art would routinely optimize. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Art Unit: 1655

Thus, optimization of general conditions is a routine practice that would be obvious for a person of ordinary skill in the art to employ. It would have been customary for an artisan of ordinary skill to determine the optimal amount of each ingredient to add in order to best achieve the desired results. Thus, absent some demonstration of unexpected results from the claimed parameters, this optimization of ingredient amount would have been obvious at the time of applicant's invention.

Applicant argues that Takekoshi et al. does not teach hair growth with all the ingredients.

In response to Applicant's argument, Takekoshi et al. teaches hinokitiol, *Sophora flavescens*, *Asarum sieboldii* (column 7, lines 27, 53, 56-57) components at 0.01-5wt % for use as hair care hair-growing agent (column 8, lines 32-50). Kim teaches a hair growth composition with capsicum tincture and hinokitiol (Abstract). Ishida et al. teaches ethanol extract of saishin or *Asiasarum sieboldi*, where 0.5% wt of the extract is used (Abstract). *Sophora flavescens* would intrinsically contain inhibitor of 5-alpha reductase because the *Sophorae radix* is the same plant as claimed. *Sophorae Radix* is also known as *Sophora flavescens* (see [http://www.fzrm.com/plantextracts/Lightyellow\\_Sophora\\_Root\\_extract.htm](http://www.fzrm.com/plantextracts/Lightyellow_Sophora_Root_extract.htm)). Hair is attached to skin. When one washes hair, skin attached to the hair is also being washed. Thus, an artisan of ordinary skill would reasonably expect that hinokitiol, *Sophora flavescens*, ethanol extract of *Asarum sieboldii*, capsicum tincture could be used as the types hair care ingredient taught by the references. This reasonable expectation of success would motivate the artisan to use ethanol extract of the same ingredient in the

reference composition. Thus, using all the claimed ingredients is considered an obvious modification of the references.

Applicant argues that the ingredients are not used for hair growth.

In response to Applicant's argument, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Claim 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takekoshi et al. (US 6497889 B2) in view of Niazi (US 6495174 B1) and Kim (WO 02/072124 A1).

Takekoshi et al. teaches cosmetic with hinokitiol, *Sophora flavescens*, *Asarum sieboldii* (column 7, lines 27, 53, 56-57), components at 0.01-5wt % for use as hair care cosmetic, hair shampoo, hair rinse, hair conditioner, hair nourishing agent, hair-growing agent (column 8, lines 32-50). *Asiasari radix* is also known as *Asarum sieboldii* (see <http://www.naturalstandard.com/index-abstract.asp?create-abstract=/monographs/herbssupplements/patient-asarum.asp>). *Sophorae Radix* is also known as *Sophora flavescens* (see [http://www.fzrm.com/plantextracts/Lightyellow\\_Sophora\\_Root\\_extract.htm](http://www.fzrm.com/plantextracts/Lightyellow_Sophora_Root_extract.htm)). *Sophorae* would intrinsically contain inhibitor of 5 alpha-reductase.

Art Unit: 1655

However, it does not teach promoting hair growth in a patient in need thereof, Asiasari radix extracted with lower alcohol, capsicum tincture.

Niazi teaches composition to treat alopecia by direct application to scalp in human with tincture capsicum (Abstract). Alopecia, baldness, is a deficiency of hair is a cosmetic problem in humans (column 3, lines 7-8).

Kim teaches Asiasari radix extracts are obtained by extracting with lower alcohol having 1 carbon atom to 4 carbon atoms (page 8, lines 11-12), where the extract is used from 0.5-50% by total weight of the composition (page 7, lines 12-14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use capsicum tincture because it can be applied to scalp of human to treat baldness. One would have been motivated to make the composition with capsicum for the expected benefit of making a cosmetic composition for hair growing. Absent evidence to the contrary, there would have been a reasonable expectation of success in making the claimed invention from the combined teachings of the cited references.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use lower alcohol extract of Asiasari radix because the extraction process is routinely used for extracting Asiasari radix. One would have been motivated to make Asiasari radix extract with lower alcohol for the expected benefit of obtaining purer and higher concentrated extracts of Asiasari radix. Absent evidence to the contrary, there would have been a reasonable expectation of success in making the claimed invention from the combined teachings of the cited references.



***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CATHERYNE CHEN whose telephone number is (571)272-9947. The examiner can normally be reached on Monday to Friday, 9-5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terry McKelvey can be reached on 571-272-0775. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1655

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Catheryne Chen  
Examiner Art Unit 1655

/Michael V. Meller/  
Primary Examiner, Art Unit 1655